

REMARKS

Claims 24-46 are pending. Favorable reconsideration is respectfully requested.

The present invention relates to a liquid developer for developing a latent image on a latent image carrier, comprising:

colored particles comprising at least a resin and a colored substance, wherein the concentration of the colored particles in the liquid developer is 5 wt% to 40 wt%, wherein the colored particles are capable of being deposited on a latent image formed on an image carrier to develop the latent image;

a liquid having a viscosity of 10 to 1,000 mPa·S and serving as a dispersant for the colored particles;

where a substance charged to a polarity opposite to the polarity of the colored particles is contained in the liquid in a ratio of 0.05 parts by weight to 20 parts by weight to 1 part by weight of the colored particles as a dispersion-facilitating substance for facilitating dispersion of the colored particles in the liquid.

See Claim 24.

Thus, the present image is directed to high density and high viscosity liquid developer. That is, the concentration of the colored particles in the liquid developer is 5 wt% to 40 wt% and the liquid has a viscosity of 10 to 1,000 mPa·S.

An important feature of the liquid developer is that it contains a substance charged to a polarity opposite to the polarity of the colored particles. The presence of that substance provides the effect that the developer remains on a developed image in an adequate amount in the image transferring step, but does not remain thereon in an excessive amount during the fixing step. See the present specification at page 95, line 25 to page 96, line 8. That effect prevents poor transfer caused by shortage of the liquid and poor fixation caused by due to an excess amount of the liquid. See page 26, lines 9-17.

The rejection of the claims under 35 U.S.C. §103(a) over Takao et al. in view of Swidler et al. and Elmasry et al. is respectfully traversed. Those references fail to suggest the claimed liquid developer.

Takao et al. describe a conventional low density and low viscosity liquid developer, which contains a graft copolymer. See the Abstract. Thus, the reference fails to disclose that the concentration of the colored particles in the liquid developer is 5 wt% to 40 wt% and the liquid has a viscosity of 10 to 1,000 mPa·S. In particular, the highest viscosity described by Takao et al. is 6.8 mPa·S. See Table 3 at columns 37-38. There is no suggestion in the reference for a viscosity in the range of 10 to 1,000 mPa·S as claimed.

In addition, Takao et al. fails to explicitly disclose that the graft copolymer has a polarity opposite to the polarity of the colored particles. In fact, it is not necessary to add a dispersion-facilitating substance having a polarity opposite to the polarity of the colored particles to the conventional low density, low viscosity developer described by Takao et al.

Elmasry is cited for the description of metallic soaps. Swidler is cited for the description of liquid developers containing charge control agents. Those references taken in combination with Takao et al. fail to suggest the liquid developer is 5 wt% to 40 wt% and the liquid has a viscosity of 10 to 1,000 mPa·S.

Accordingly, the combination of Takao et al., Elmasry and Swidler fails to suggest the claimed liquid developer. Accordingly, withdrawal of this ground of rejection is respectfully requested.

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Applicants submit that the present application is in condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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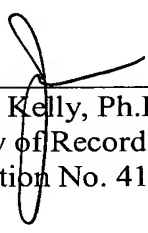
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